

**Amendments to the Specification:**

Please replace the last paragraph at page 2, with the following amended paragraph:

Under another aspect of the invention, a system for and method of providing a service addressed by an IP address are provided. At least two computer processor[[s]] each include logic to provide the service. Cluster logic receives request messages for the service. The messages have the IP address. The cluster logic distributes the requests to one of the at least two computer processors having logic to provide the service.

Please replace the last paragraph at page 9, with the following amended paragraph:

The IP stack 305 is the communication protocol stack provided with the operating system (e.g., Linux) used by the processing nodes 106. The IP stack provides a layer 3 interface for the applications and operating system executing on a processor 106 to communicate with the simulated Ethernet network. The IP stack provides packets of information to the virtual Ethernet layer 310 in conjunction with providing a layer 3, IP address as a destination for that packet. The IP stack logic is conventional except that certain embodiment[[s]] avoid check sum calculations and logic.

Please replace the third paragraph at page 11, with the following amended paragraph:

If the MAC address information returned from the ARP logic 350 is in~~[[an]]~~ a particular invalid format, the invalid format signals that the IP-addressed node is to an internal node, and the information in the MAC address information is used to help identify the VI (or RVI) directly connecting the two processing nodes. For example, the ARP table entry may hold information identifying the RVI 212 to use to send the packet, e.g., 212<sub>1-2</sub>, to another processing node. The driver prepends the packet with a TLV header. It then places address information into the header as well as information identifying the Ethernet protocol type. The logic then selects the appropriate VI (or RVI) on which to send the encapsulated packet. If that VI (or RVI) is operating satisfactorily it is used to carry the packet; if it is operating unsatisfactorily the packet

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is sent to the control node switch logic (more below) so that the switch logic can send it to the appropriate node. Though the ARP table may contain information to actually specify the RVI to use, many other techniques may be employed. For example, the information in the table may indirectly provide such information, e.g., by pointing to the information of interest or otherwise identifying the information of interest though not contain it.